

**REMARKS**

Applicant wishes to thank the Examiner for the indication of allowable subject matter, and for his indulgence in agreeing to reconsider claims in an Amendment under Rule 116. To expedite examination of the present Amendment, Applicant offers to participate in a telephone interview to resolve any outstanding issues.

Applicant respectfully requests that the finality of all claim rejections be held in abeyance and reconsidered because the rejections are based, in part, on factual errors related to newly cited art. In view of the errors, Applicant requests that the finality of the office action be withdrawn so that Applicant may have a fair opportunity to respond. In the alternative, Applicant requests that the above amendments be entered and this case be passed to issuance.

Applicant emphasizes that no new subject matter is claimed in any amendment herein. In accordance with 37 CFR §1.116, the above amendments are made either to comply with requirements of form expressly set forth in the final office action, or to present rejected claims in better form for reconsideration on appeal.

**I. The Claims should be reconsidered because the newly cited *Held* and *Yamamoto* references are factually misinterpreted.**

Claims 1, 2, 5-9 and 16 were rejected under §102 as being anticipated by U.S. Patent No. 3,652,894 ("Held"). *Held* is wrongly credited with disclosing a columnar electric insulating material body (FIG. 1, item 7) and a heater (FIG. 1, item 6) embedded in the second end of the body. A fair reading of *Held* reveals that heater 6 is not embedded in body 7. In view of this factual error, Applicant requests that the final rejection be reconsidered or withdrawn so that Applicant may be afforded a fair opportunity to respond.

*Held*'s item 7 is in fact an open-ended hollow cylinder. See *Held*, FIGS. 1-2 and col. 2 ln. 15-18. The volume (item 3) within item 7 is defined as a "cavity". *Id.* at col. 1, ln. 65. Thus, the claim rejections are based on a misstatement of fact that credits *Held* as teaching an "insulating material body ... filled with an insulator around the heating element." Final Office Action, p.2. There is no such insulating material in the *Held* structure because *Held* expressly discloses that heating element 6 is arranged in cavity 3. *Held* col. 1, ln. 63 to col. 2, ln. 7. Therefore, *Held* does not anticipate Claim 1 or Claim 5, each of which expressly claims a heating wire partially buried in the electric insulating material body.

In view of this evidence that was clearly set forth in record prior to filing this Response, Applicant requests reconsideration of Claims 1 and 5, and all claims depending therefrom.

Claims 1, 2, 5-9, 11-13, 16 and 18-20 were rejected under §103 as being unpatentable over U.S. Patent 6,300,711 ("Yamamoto") in view of *Held*. It is well established in patent law that a claim may be rejected as obvious only where the combination of references teach, *inter alia*, all of the claim limitations. *In re Vaack*, 947 F.2d 488 (Fed. Cir. 1991). The finality of this rejection should also be withdrawn, or the rejection reconsidered, because *Yamamoto* is also erroneously credited as teaching the claimed limitation of a heating wire partially buried in an electric insulating material body.

The Final Office Action bases these claim rejections on factual errors, first by crediting *Yamamoto* as teaching "a heater 10 embedded in ... the body 11," and adding an erroneous statement that "[t]he body is filled with an insulator around the heating element." Final Office Action, p.4. Contrary to these statements, *Yamamoto*'s body 11 is clearly a hollow tubular metal sleeve. *Yamamoto*, col. 2, ln. 37-38. It is clearly not filled with insulating material, and therefore *Yamamoto* in view of *Held* cannot be credited with teaching a columnar electric

insulating material body, as claimed in Claims 1, 5 and 20. *See also, Yamamoto*, col. 3, ln. 12-41 and FIGS. 3A to 3C, which describe how *Yamamoto's* tubular metal sleeve 11 is manufactured as a hollow metal tube. Moreover, due to the absence of insulating material within sleeve 11, *Yamamoto* in view of *Held* cannot be fairly credited as teaching a heating wire partially buried in the insulating body, as claimed in Claims 1 and 5.

In view of this evidence that was clearly set forth in record prior to filing this Response, Applicant requests reconsideration of Claims 1, 5, 20 and all claims depending therefrom.

## **II. Claim Amendments**

Claims 12 and 20 are amended only as to form.

## **III. Amendment to the Specification**

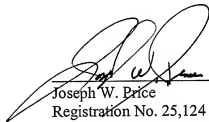
In response to the objection to the Specification, the Title has been amended in manner that Applicant submits is more clearly indicative of the invention claimed.

#### IV. Conclusion

Applicant respectfully submits that in view of the formal amendments and remarks made herein, the case is now in condition for allowance and early notification of the same is requested. If the Examiner believes that a telephone interview will help further the prosecution of the case, the undersigned attorney can be contacted at the listed telephone number.

Very truly yours,

**SNELL & WILMER L.L.P.**



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